

Remarks

This Response is submitted together with a Request for Continued Examination. Hence, the Applicants respectfully request that the Notice of Appeal be deferred in favor of further prosecution as set forth below.

The Applicants have added new Claim 21. It is based on Claim 20. However, Claim 21 additionally recites that the element has a conductivity between 10.5 and 56 m/ $\Omega \cdot \text{mm}^2$. Support may be found in the Applicants' specification in paragraph [0009] and paragraphs [0027]-[0033]. The Applicants note that the 10.5 and 56 end points are explicitly shown in paragraph [0028]. Thus, those two figures establish the upper and lower limits. However, the actual conductivity of the diverter will lie in between those numbers given that the diverters consist of copper foil coated with nickel on both surfaces thereof.

Entry of Claim 21 into the official file is respectfully requested.

Claim 20 stands rejected under 35 USC §103 over US '608 and US '609 combined with US '938. The Applicants respectfully submit that the combination fails to disclose, teach or suggest the Applicants' claimed voltaic element as recited in Claim 20.

The Applicants will first begin with US '906 and its complete irrelevance. In that regard, the Applicants respectfully submit that one skilled in the art would not have combined US '906 with US '938 and/or US '608. This is because US '906 is directed to printed circuit boards and not batteries. Further, US '906 addresses the very specific corrosion problem that only occurs on copper clad/laminated printed circuit boards. In particular, that problem is the formation of stains and the deterioration between the copper foil and the resin as outlined in US '906 in column 1, lines 23-40.

This has nothing to do with the primary issues of concern to the Applicants. It is important to note that the Applicants' primary goal was not to improve corrosion resistance of diverters. In

sharp contrast, the Applicants' primary objective was to provide cells with a very low internal impedance. This is described in paragraphs [0003] and [0004] in the Applicants' specification. This difference in emphasis is also explained by reference to the Applicants' samples all of which deal with resistance/impedance and not corrosion resistance.

This is important because resistance/impedance of diverters is simply not even recognized in US '906 and US '938. Hence, those skilled in the art would have no incentive to make this combination.

The rejection relies heavily on US '938 and a passage in paragraph [0085] of that publication, which recites that "terminals of various metals ... may be surface coated with titanium, tantalum, chromium and zinc" for the notion that it would be obvious to one skilled in the art not to coat the metal surface at all. The Applicants reproduce the entirety of that excerpt from US '938 below for the sake of clarity:

The terminals may be foils of various metals and alloys such as aluminum, nickel, copper and stainless steel which may be surface coated with titanium, tantalum, chromium, zinc, nickel or tin.

The problem with this text is that it is not relevant. In particular, that text, as reproduced above, refers to "terminals." It does not refer to "collectors." Thus, it seems that the rejection does not recognize the difference between collectors and diverters as recited in Applicants' Claim 20.

In other words, the Applicants identify two different structures, namely collectors and diverters, as illustrated in Fig. 1. The collectors are identified by reference numbers 2 and 3 and the diverters are identified by reference numbers 4 and 5. When taken in the context of US '938, the Applicants' claimed diverters are the structure referred to in US '938 as "terminals." The Applicants' claimed collectors are inherently different from the diverters in Claim 20 and are also different from the terminals disclosed in US '938. Thus, the Applicants respectfully submit that the

disclosure in US '938 is relevant to the Applicants' diverters, but utterly irrelevant to the Applicants' collectors. Thus, Claim 20 recites a combination of collectors consisting of copper without a nickel coating and diverters consisting of foil with a nickel coating. The rejection simply does not recognize this difference. As a consequence, the Applicants respectfully submit that even if the teachings of US '938 are applied to Claim 20, they are applicable to the Applicants' diverters, but not the collectors. In other words, US '938 does not provide any disclosure directed to or relevant to the Applicants' collectors. Hence, the combination of US '906 and US '608 with US '938 would still fail to address the Applicants' claimed collectors and would therefore inherently fail to provide any teachings, suggestions or guidance with respect to the Applicants' claimed collectors. Thus, the rejection must fail.

The Applicants thus note that if the search for corrosion resistant materials as is mentioned in the rejection would have been the driving force behind the Applicants' activities (or those of one skilled in the art), it would have been inconsequential to replace only the diverters of the element by nickel-coated copper and not the collectors, which are usually the structures in direct contact with the electrolyte and, therefore, being subjected to an atmosphere which is much more corrosive than the atmosphere surrounding the diverters. Hence, the combination would fail to result in the Applicants' structure as recited in Claim 20.

The rejection also points out that the Applicants' specification discloses that the "copper is preferably coated with nickel." The Applicants note that referring to the Applicants' specification is improper in addressing a rejection under 35 USC §103. The rejection must be based on the language of the claim, not the Applicants' specification. If language is included in a claim, it must be considered relative to the prior art. The Applicants' discussion in the specification is not relevant and it is therefore improper to rely on the Applicants' specification as a basis to justify rejecting a

claim. The analysis of a claim must be based on the prior art, not the Applicants' specification.

The Applicants respectfully submit that they have established that there is no motivation to make the combination of US '608 and US '906 with US '938 and that, in any event, even if the combination were to be made, the structures resulting from that combination would be completely different because the focus of such a combination would be on the Applicants' claimed diverters, not the Applicants' claimed collectors. Withdrawal of the rejection is accordingly respectfully requested.

In light of the foregoing, the Applicants respectfully submit that the entire Application is now in condition for allowance, which is respectfully requested.

Respectfully submitted,



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